

k = 0
kurtosis = 0.11385504010323544
shapiro = ShapiroResult(statistic=0.9964508414268494, pvalue=1.4331195119510198e-09)

k = 1
kurtosis = 0.49006632003882844
shapiro = ShapiroResult(statistic=0.9978731274604797, pvalue=2.1581247438007267e-06)

k = 2
kurtosis = 0.32223126093342724
shapiro = ShapiroResult(statistic=0.9984390735626221, pvalue=7.723437738604844e-05)

k = 3
kurtosis = 0.4090058607956486
shapiro = ShapiroResult(statistic=0.9983540773391724, pvalue=4.374266427475959e-05)

k = 4
kurtosis = 0.320324848414999
shapiro = ShapiroResult(statistic=0.998994767665863, pvalue=0.004279990680515766)

k = 5
kurtosis = 0.14671878269694005
shapiro = ShapiroResult(statistic=0.9995405673980713, pvalue=0.2827364504337311)

k = 6
kurtosis = 0.217971482587334
shapiro = ShapiroResult(statistic=0.9992852210998535, pvalue=0.041431207209825516)

k = 7
kurtosis = 0.15294668324744398
shapiro = ShapiroResult(statistic=0.9995539784431458, pvalue=0.30965158343315125)

k = 8
kurtosis = 0.09429532714871414
shapiro = ShapiroResult(statistic=0.9996916651725769, pvalue=0.6814862489700317)

k = 9
kurtosis = 0.09438225302255043
shapiro = ShapiroResult(statistic=0.99968421459198, pvalue=0.6587111353874207)

k = 10
kurtosis = 0.2638669444643149
shapiro = ShapiroResult(statistic=0.9991306066513062, pvalue=0.012280354276299477)

k = 11
kurtosis = 0.2860969600420744

shapiro = ShapiroResult(statistic=0.9990627765655518, pvalue=0.007236056495457888)

k = 12

kurtosis = 0.27699290931427534

shapiro = ShapiroResult(statistic=0.9991077780723572, pvalue=0.010274169966578484)

k = 13

kurtosis = 0.2626784293055433

shapiro = ShapiroResult(statistic=0.9990760684013367, pvalue=0.008025193586945534)

k = 14

kurtosis = 0.1988036968786666

shapiro = ShapiroResult(statistic=0.999217689037323, pvalue=0.02434368245303631)

k = 15

kurtosis = 0.28989565398817874

shapiro = ShapiroResult(statistic=0.9988800287246704, pvalue=0.0017915443750098348)

k = 16

kurtosis = 0.227901414322766

shapiro = ShapiroResult(statistic=0.9992390275001526, pvalue=0.028798703104257584)

k = 17

kurtosis = 0.22578520341194563

shapiro = ShapiroResult(statistic=0.9987739324569702, pvalue=0.0008159038261510432)

k = 18

kurtosis = 0.17268015013544957

shapiro = ShapiroResult(statistic=0.9991816282272339, pvalue=0.018332164734601974)

k = 19

kurtosis = 0.19087266767041422

shapiro = ShapiroResult(statistic=0.9991697669029236, pvalue=0.016696710139513016)

k = 20

kurtosis = 0.2372815850917327

shapiro = ShapiroResult(statistic=0.9988934397697449, pvalue=0.001981665613129735)

k = 21

kurtosis = 0.19295533083813599

shapiro = ShapiroResult(statistic=0.9988468885421753, pvalue=0.0013984853867441416)

k = 22

kurtosis = 0.13957673059477838

shapiro = ShapiroResult(statistic=0.999316394329071, pvalue=0.0529031902551651)

k = 23
kurtosis = 0.1830457326672068
shapiro = ShapiroResult(statistic=0.9992467761039734, pvalue=0.030619757249951363)

k = 24
kurtosis = 0.17220589826810961
shapiro = ShapiroResult(statistic=0.9992262721061707, pvalue=0.026050932705402374)

k = 25
kurtosis = 0.1642626053231493
shapiro = ShapiroResult(statistic=0.9993299245834351, pvalue=0.05880337208509445)

k = 26
kurtosis = 0.1609724568498967
shapiro = ShapiroResult(statistic=0.9992756843566895, pvalue=0.03844268620014191)

k = 27
kurtosis = 0.18573103219670672
shapiro = ShapiroResult(statistic=0.9991657137870789, pvalue=0.016180308535695076)

k = 28
kurtosis = 0.1796854331606199
shapiro = ShapiroResult(statistic=0.9992455244064331, pvalue=0.03031313605606556)

k = 29
kurtosis = 0.1509379029136868
shapiro = ShapiroResult(statistic=0.9993062615394592, pvalue=0.048860762268304825)

k = 30
kurtosis = 0.14085810999678916
shapiro = ShapiroResult(statistic=0.9994471073150635, pvalue=0.14446070790290833)

k = 31
kurtosis = 0.10746867783479175
shapiro = ShapiroResult(statistic=0.9993851184844971, pvalue=0.09024469554424286)

k = 32
kurtosis = 0.11136727139035063
shapiro = ShapiroResult(statistic=0.9992058873176575, pvalue=0.02218971773982048)

k = 33
kurtosis = 0.08225450688110847
shapiro = ShapiroResult(statistic=0.9990260601043701, pvalue=0.005446648225188255)

k = 34
kurtosis = 0.0664702906732737

shapiro = ShapiroResult(statistic=0.99906986951828, pvalue=0.007646386511623859)

k = 35

kurtosis = 0.08259328193616655

shapiro = ShapiroResult(statistic=0.9991689920425415, pvalue=0.016595320776104927)

k = 36

kurtosis = 0.07695040852175206

shapiro = ShapiroResult(statistic=0.999209463596344, pvalue=0.022824158892035484)

k = 37

kurtosis = 0.07755753551843814

shapiro = ShapiroResult(statistic=0.9992167353630066, pvalue=0.024169938638806343)

k = 38

kurtosis = 0.10026538067533552

shapiro = ShapiroResult(statistic=0.9991785287857056, pvalue=0.017889492213726044)

k = 39

kurtosis = 0.06481436131194629

shapiro = ShapiroResult(statistic=0.9991589188575745, pvalue=0.015339714474976063)

k = 40

kurtosis = 0.08983226437671643

shapiro = ShapiroResult(statistic=0.9994651675224304, pvalue=0.1651909053325653)

k = 41

kurtosis = 0.07629979682695476

shapiro = ShapiroResult(statistic=0.9993811249732971, pvalue=0.08749622106552124)

k = 42

kurtosis = 0.06394628115481238

shapiro = ShapiroResult(statistic=0.999427318572998, pvalue=0.12447933852672577)

k = 43

kurtosis = 0.08472960556592213

shapiro = ShapiroResult(statistic=0.9994351267814636, pvalue=0.13205724954605103)

k = 44

kurtosis = 0.08771090389748348

shapiro = ShapiroResult(statistic=0.99953693151474, pvalue=0.2757694721221924)

k = 45

kurtosis = 0.11951360850967818

shapiro = ShapiroResult(statistic=0.9994798898696899, pvalue=0.18400558829307556)

k = 46
kurtosis = 0.11950122926643392
shapiro = ShapiroResult(statistic=0.9994988441467285, pvalue=0.21110306680202484)

k = 47
kurtosis = 0.11606335264437817
shapiro = ShapiroResult(statistic=0.9995145797729492, pvalue=0.23606276512145996)

k = 48
kurtosis = 0.10400080923172705
shapiro = ShapiroResult(statistic=0.9995216131210327, pvalue=0.24803993105888367)

k = 49
kurtosis = 0.10264035834812635
shapiro = ShapiroResult(statistic=0.9996296763420105, pvalue=0.4965275228023529)

k = 50
kurtosis = 0.09958536097642012
shapiro = ShapiroResult(statistic=0.9996477961540222, pvalue=0.5487492680549622)

k = 51
kurtosis = 0.08073615369985854
shapiro = ShapiroResult(statistic=0.9996309280395508, pvalue=0.5000019669532776)

k = 52
kurtosis = 0.09066773366463021
shapiro = ShapiroResult(statistic=0.9996684789657593, pvalue=0.6109239459037781)

k = 53
kurtosis = 0.09297752111123803
shapiro = ShapiroResult(statistic=0.9996383786201477, pvalue=0.5212796926498413)

k = 54
kurtosis = 0.05551151657881448
shapiro = ShapiroResult(statistic=0.9997010827064514, pvalue=0.7099895477294922)

k = 55
kurtosis = 0.07279026703164737
shapiro = ShapiroResult(statistic=0.9996728301048279, pvalue=0.6240603923797607)

k = 56
kurtosis = 0.0684459644011004
shapiro = ShapiroResult(statistic=0.9996121525764465, pvalue=0.4481668174266815)

k = 57
kurtosis = 0.05904445840190853

shapiro = ShapiroResult(statistic=0.9996818900108337, pvalue=0.6517366170883179)

k = 58

kurtosis = 0.03696720503102213

shapiro = ShapiroResult(statistic=0.9997139573097229, pvalue=0.7481328845024109)

k = 59

kurtosis = 0.018169320573990344

shapiro = ShapiroResult(statistic=0.9997042417526245, pvalue=0.7194412350654602)

k = 60

kurtosis = -0.01828065659574918

shapiro = ShapiroResult(statistic=0.9994944334030151, pvalue=0.2044481635093689)

k = 61

kurtosis = -0.048813479899660006

shapiro = ShapiroResult(statistic=0.9995421767234802, pvalue=0.2858807444572449)

k = 62

kurtosis = -0.0740192957449306

shapiro = ShapiroResult(statistic=0.999595582485199, pvalue=0.40515321493148804)

k = 63

kurtosis = -0.10681190380640526

shapiro = ShapiroResult(statistic=0.9996189475059509, pvalue=0.4666276276111603)

k = 64

kurtosis = -0.06898129686552235

shapiro = ShapiroResult(statistic=0.9997041821479797, pvalue=0.7192059755325317)

k = 65

kurtosis = -0.07336356895977802

shapiro = ShapiroResult(statistic=0.9997023940086365, pvalue=0.7139180302619934)

k = 66

kurtosis = -0.07626750466702115

shapiro = ShapiroResult(statistic=0.9997057914733887, pvalue=0.7239972352981567)

k = 67

kurtosis = -0.08320747185179522

shapiro = ShapiroResult(statistic=0.9996738433837891, pvalue=0.6270620822906494)

k = 68

kurtosis = -0.06755931717428698

shapiro = ShapiroResult(statistic=0.9996546506881714, pvalue=0.56926429271698)

k = 69
kurtosis = -0.058148553138149595
shapiro = ShapiroResult(statistic=0.9996675252914429, pvalue=0.6080263257026672)

k = 70
kurtosis = -0.04814113231004136
shapiro = ShapiroResult(statistic=0.9997004866600037, pvalue=0.7082010507583618)

k = 71
kurtosis = -0.056012185244687096
shapiro = ShapiroResult(statistic=0.9995589852333069, pvalue=0.32009533047676086)

k = 72
kurtosis = -0.04616286308241824
shapiro = ShapiroResult(statistic=0.9995980858802795, pvalue=0.41157010197639465)

k = 73
kurtosis = -0.04390827219568605
shapiro = ShapiroResult(statistic=0.9996475577354431, pvalue=0.5481835007667542)

k = 74
kurtosis = -0.06017714418218301
shapiro = ShapiroResult(statistic=0.9996321201324463, pvalue=0.5033032894134521)

k = 75
kurtosis = -0.07288389819250529
shapiro = ShapiroResult(statistic=0.9996396899223328, pvalue=0.5250781774520874)

k = 76
kurtosis = -0.07732172791408454
shapiro = ShapiroResult(statistic=0.9995953440666199, pvalue=0.4045476019382477)

k = 77
kurtosis = -0.025394616161658945
shapiro = ShapiroResult(statistic=0.9996262192726135, pvalue=0.4867682456970215)

k = 78
kurtosis = -0.02121764116277447
shapiro = ShapiroResult(statistic=0.9996814131736755, pvalue=0.6501402854919434)

k = 79
kurtosis = -0.027336659199679314
shapiro = ShapiroResult(statistic=0.9997521638870239, pvalue=0.8519749641418457)

k = 80
kurtosis = -0.004740170616562622

shapiro = ShapiroResult(statistic=0.9997147917747498, pvalue=0.7505583763122559)

k = 81

kurtosis = 0.019054180459591397

shapiro = ShapiroResult(statistic=0.999733030796051, pvalue=0.8023064732551575)

k = 82

kurtosis = 0.021271342097591184

shapiro = ShapiroResult(statistic=0.9996508359909058, pvalue=0.557803750038147)

k = 83

kurtosis = -0.039070645827191

shapiro = ShapiroResult(statistic=0.999650776386261, pvalue=0.5576570630073547)

k = 84

kurtosis = -0.019148548554202005

shapiro = ShapiroResult(statistic=0.9996614456176758, pvalue=0.5896241664886475)

k = 85

kurtosis = -0.023320126970055366

shapiro = ShapiroResult(statistic=0.9996365904808044, pvalue=0.5161148309707642)

k = 86

kurtosis = -0.012791053783519857

shapiro = ShapiroResult(statistic=0.9996408820152283, pvalue=0.5285657644271851)

k = 87

kurtosis = -0.0336253971295033

shapiro = ShapiroResult(statistic=0.999649703502655, pvalue=0.554477334022522)

k = 88

kurtosis = -0.042853509175219795

shapiro = ShapiroResult(statistic=0.9996540546417236, pvalue=0.5674805641174316)

k = 89

kurtosis = -0.06972922976705442

shapiro = ShapiroResult(statistic=0.9995162487030029, pvalue=0.23890434205532074)

k = 90

kurtosis = -0.10424296234246899

shapiro = ShapiroResult(statistic=0.9994605183601379, pvalue=0.1596345454454422)

k = 91

kurtosis = -0.10213770025988467

shapiro = ShapiroResult(statistic=0.9995480179786682, pvalue=0.2974095344543457)

k = 92
kurtosis = -0.09228858260851291
shapiro = ShapiroResult(statistic=0.9995770454406738, pvalue=0.3602588176727295)

k = 93
kurtosis = -0.07822038398631781
shapiro = ShapiroResult(statistic=0.9997186660766602, pvalue=0.7618639469146729)

k = 94
kurtosis = -0.057234732165313495
shapiro = ShapiroResult(statistic=0.999686598777771, pvalue=0.6661109328269958)

k = 95
kurtosis = -0.07620930466656706
shapiro = ShapiroResult(statistic=0.9996161460876465, pvalue=0.45899033546447754)

k = 96
kurtosis = -0.07929732616373064
shapiro = ShapiroResult(statistic=0.9996185898780823, pvalue=0.46560460329055786)

k = 97
kurtosis = -0.07724503431136132
shapiro = ShapiroResult(statistic=0.9997150301933289, pvalue=0.7513201832771301)

k = 98
kurtosis = -0.07536645888915894
shapiro = ShapiroResult(statistic=0.9996775984764099, pvalue=0.638568639755249)

k = 99
kurtosis = -0.0838910890993314
shapiro = ShapiroResult(statistic=0.9997407793998718, pvalue=0.8229652047157288)

k = 100
kurtosis = -0.08099421229645776
shapiro = ShapiroResult(statistic=0.9996622204780579, pvalue=0.5919844508171082)